



SEQUENCE LISTING

<110> GUPTA, ANTJE
ZIMMER, ANKE
BOBKOVÁ, MARIA

<120> OXIDOREDUCTASE FROM PICHIA CAPSULATA

<130> 4838-002

<140> 10/561,043
<141> 2005-12-16

<150> PCT/EP04/005831
<151> 2004-05-28

<150> DE 103 27 454.5-41
<151> 2003-06-18

<160> 10

<170> PatentIn Ver. 3.3

<210> 1
<211> 1175
<212> DNA
<213> Pichia capsulata

<400> 1
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cgaattcaaa a gggatgaat tctataccga tatcagccaa tcttcttgaa aaccagccctc 780
gtttgattac ttttttgcact tcgtttcgct gcaggtcacc ttgcacatct gccagaagta 840
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caccgaacctt gaaaaaccttc ctgaatcaact tgaaaaactg gaggagggtt agatcaatgg 1080
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atatgatgtc gttttccaa tccaaagggg gggcc 1175

<210> 2
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<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Protein

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 20 25 30

 Gln Ala Gly Tyr Ile Phe Lys Lys Gly Ala Gly His Ile Val Lys Ala
 35 40 45

 Glu Val Pro Ile Pro Lys Pro Thr Gly Ala Gln Ser Leu Leu Arg Val
 50 55 60

 Lys Ala Ala Gly Met Cys His Ser Asp Leu His Val Ile Gly Glu Thr
 65 70 75 80

 Leu Glu Val Pro Thr Asp Gly Tyr Val Leu Gly His Glu Ile Ala Gly
 85 90 95

 Glu Leu Val Glu Ile Gly Asp Ser Val Asn Pro Glu Val Phe Lys Val
 100 105 110

 Gly Gly Arg Tyr Ala Val His Gly Leu Asn Ser Cys Gly Ser Cys Glu
 115 120 125

 Met Cys Arg Thr Gly His Asp Asn Asp Cys Thr Gly Asn Glu Ser Lys
 130 135 140

 Trp Tyr Gly Leu Gly Ile Ser Gly Gly Tyr Gln Gln Tyr Leu Leu Val
 145 150 155 160

 Pro Asn Ser His His Leu Leu Pro Ile Pro Asp Asn Val Ser Tyr Glu
 165 170 175

 Val Ala Ala Ala Thr Ser Asp Ala Val Leu Thr Pro Tyr His Ala Ile
 180 185 190

 Lys Asn Ser Gly Val Thr Pro Ser Ser Lys Val Leu Met Phe Gly Leu
 195 200 205

 Gly Gly Leu Gly Ser Asn Ala Leu Gln Ile Leu Lys Ala Phe Gly Ala
 210 215 220

 Tyr Val Val Ala Val Asp Val Lys Pro Ala Ser Lys Ala Ile Ala Asp
 225 230 235 240

 Glu Phe Lys Ala Asp Glu Phe Tyr Thr Asp Ile Ser Gln Ser Ser Trp
 245 250 255

 Lys Pro Ala Ser Phe Asp Tyr Cys Phe Asp Phe Val Ser Leu Gln Val
 260 265 270

 Thr Phe Asp Ile Cys Gln Lys Tyr Ile Lys Ser His Gly Thr Ile Phe
 275 280 285

 Pro Val Gly Leu Gly Ser Ser Lys Leu Thr Phe Asp Leu Gly Asn Leu
 290 295 300

Ala Leu Arg Glu Val Lys Ile Val Gly Asn Phe Trp Gly Thr Ser Gln
305 310 315 320

Glu Gln Ile Glu Ala Met Glu Leu Val Ser Ser Gly Arg Val Lys Pro
 325 330 335

Gln Val His Thr Thr Glu Leu Glu Asn Leu Pro Glu Ser Leu Glu Lys
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Leu Glu Glu Gly Lys Ile Asn Gly Arg Leu Val Met Leu Pro
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<212> DNA
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Synthetic
Oligonucleotide

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<210> 5
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<212> DNA
<213> Artificial Sequence
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<212> DNA
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<220>
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<400> 6
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<210> 7
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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Oligonucleotide

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<210> 8
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 <212> DNA
 <213> Pichia capsulata

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 gctgcaggaa tggccactc tgacttgcac gtcatggag aaacatttga ggtccctacc 180
 gatgggtacg tgctcggtca cgaaatttgc ggtgaatttgg tggagatcgg agactcggtc 240
 aaccctgaag ttttaaggt gggaggccgt tatgtgttc atggactgaa ttctgtgtgaa 300
 tcctgtgaga tgggtcgatc cggatcatgac aatgactgta ctggaaatgaa atcgaaatgg 360
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 ctattgccta ttccagataa cgtgtccatc gaagttgtc ctgccaccc ttagtgcgtc 480
 ttgactccat accatgttat caagaattcc ggagtactc catcttctaa ggtgttgatg 540
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 gaattctata cccatgtatc ccaatcttct tggaaaccag cctcggttga ttactgttt 720
 gacttcgttt cgctgcggggtt caccatcgac atctgtccaga agtataatcaa gtcccaacgg 780
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 atggagctgg ttagctcggtt tagggtaagttt cctcaagtcc acaccacccaa acttggaaaac 960
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<210> 9
 <211> 341
 <212> PRT
 <213> Pichia capsulata

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 1 5 10 15

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 20 25 30

Ala Gln Ser Leu Leu Arg Val Lys Ala Ala Gly Met Cys His Ser Asp
 35 40 45

 Leu His Val Ile Gly Glu Thr Leu Glu Val Pro Thr Asp Gly Tyr Val
 50 55 60

 Leu Gly His Glu Ile Ala Gly Glu Leu Val Glu Ile Gly Asp Ser Val
 65 70 75 80

 Asn Pro Glu Val Phe Lys Val Gly Gly Arg Tyr Ala Val His Gly Leu
 85 90 95

 Asn Ser Cys Gly Ser Cys Glu Met Cys Arg Thr Gly His Asp Asn Asp
 100 105 110

 Cys Thr Gly Asn Glu Ser Lys Trp Tyr Gly Leu Gly Ile Ser Gly Gly
 115 120 125

 Tyr Gln Gln Tyr Leu Leu Val Pro Asn Ser His His Leu Leu Pro Ile
 130 135 140

 Pro Asp Asn Val Ser Tyr Glu Val Ala Ala Ala Thr Ser Asp Ala Val
 145 150 155 160

 Leu Thr Pro Tyr His Ala Ile Lys Asn Ser Gly Val Thr Pro Ser Ser
 165 170 175

 Lys Val Leu Met Phe Gly Leu Gly Gly Leu Gly Ser Asn Ala Leu Gln
 180 185 190

 Ile Leu Lys Ala Phe Gly Ala Tyr Val Val Ala Val Asp Val Lys Pro
 195 200 205

 Ala Ser Lys Ala Ile Ala Asp Glu Phe Lys Ala Asp Glu Phe Tyr Thr
 210 215 220

 Asp Ile Ser Gln Ser Ser Trp Lys Pro Ala Ser Phe Asp Tyr Cys Phe
 225 230 235 240

 Asp Phe Val Ser Leu Gln Val Thr Phe Asp Ile Cys Gln Lys Tyr Ile
 245 250 255

 Lys Ser His Gly Thr Ile Phe Pro Val Gly Leu Gly Ser Ser Lys Leu
 260 265 270

 Thr Phe Asp Leu Gly Asn Leu Ala Leu Arg Glu Val Lys Ile Val Gly
 275 280 285

 Asn Phe Trp Gly Thr Ser Gln Glu Gln Ile Glu Ala Met Glu Leu Val
 290 295 300

 Ser Ser Gly Arg Val Lys Pro Gln Val His Thr Thr Glu Leu Glu Asn
 305 310 315 320

 Leu Pro Glu Ser Leu Glu Lys Leu Glu Glu Gly Lys Ile Asn Gly Arg
 325 330 335

Leu Val Met Leu Pro
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<210> 10
<211> 12
<212> PRT
<213> *Pichia capsulata*

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1 5 10